

tions staffed (NPS) is now six in split 1 and three for split 2. The six agents in split 1 are all in the IN state. There are now no calls waiting (NCW). There have been no more calls completed (CI), so the number is still nine, three of which were answered in >YY (60) seconds. The number of abandoned calls is still two. The average talk time has been reduced to 120 seconds. This is due to the manager informing all agents that the split is overloaded and that they must complete their work more quickly. The average speed of answer (ASA) has continued to grow during this time and is now up to 50. The exception report remains indicating that all trunks are busy and have been busy more than 100 seconds.

FIG. 17 shows the situation one minute later when the manager's actions have had time to take effect. Particular attention should be given to agent TQ at position 20 who has been busy on a single call during the whole period of the example. Agent TQ has now terminated that call and is now busy on another call. In addition to that, agent OFG at position 15 has terminated a call and is busy on another incoming call. The number of positions staffed (NPS) is still six. All of them are still working in the IN pool. There are no calls waiting. The oldest call waiting is still zero. The incoming calls completed (CI) has grown to eleven, five of which were answered in >YY (60) seconds. Still only two have been abandoned, and the average talk time (ATT) has begun to creep down, now showing 110 seconds. The average speed of answer has remained the same at 50 seconds. All six trunks are still busy, but since two were idle during the past period, they have not all been busy >100 seconds. Therefore, the exception report has been deleted.

FIG. 18 shows the situation one minute later when the current crisis has subsided. Agent BIS at position 13 has now completed a call and remains in the IN pool, although idle. The number of positions staffed is still six. The number in the IN pool is still six. The number in after call work is still zero. There are no calls waiting. Twelve calls have been completed, of which five were still answered in >YY (60) seconds. The average talk time is now down to 100 seconds and only five of the six trunks in the trunk group are busy.

At this point, the system manager may make a decision to return one of the agents from split 1 back to split 2, or to continue to operate with six agents in this split until making certain that the number of incoming calls have actually subsided.

The foregoing description assumes an ACD which is separate from the display system. Of course, this need not be so, and the display may be integral with the ACD. Such an arrangement would result in a much simpler interface between the display and the system, and may avoid the need for strict adherence to protocols for the transfer of agent, station, and trunk data. Such a system would be built without departing from the spirit and scope of this invention. Also, it should be understood that the calls need not be incoming on trunks, but could be on lines.

What is claimed is:

1. A management information system (MIS) for use with an automatic call distribution (ACD) system having a plurality of attendant positions operable to answer incoming calls from a plurality of trunks, said MIS system comprising

a display,

means for continuously receiving from said ACD certain ACD data, said data corresponding to cur-

rent call answering activity at said attendant positions,

means for comparing said data to previously received data to determine which data is to be displayed,

means for formatting any said data determined to be displayed, and

means for presenting said formatted data to said display substantially concurrent with the reception of said ACD data.

2. The invention set forth in claim 1 wherein said formatting means is operative to create on said display three separate display sections, one section having data on an attendant position-by-position basis, one section having data on a statistical system basis, and the third section having data pertaining to said trunks.

3. The invention set forth in claim 1 further comprising means for storing system parameters against which the performance of said ACD is to be measured,

means for matching certain segments of said current received data against stored ones of said parameters, and

means for providing exception data to said display under certain mismatch conditions.

4. The invention set forth in claim 1 wherein said presenting means includes means for presenting to said display only data which has changed from the last time of presentation.

5. The invention set forth in claim 1 wherein said presented data is subdivided into individually updatable segments, said system further comprising

means for storing for a period of time changed data to be presented to a particular segment while allowing other subsequently generated data pertaining to another segment to be presented to said display.

6. The invention set forth in claim 1 further comprising means for connecting said management information system to a plurality of automatic call distribution systems.

7. A communication system having a plurality of terminals operable for answering communication connections directed thereto, said communication system comprising

means for receiving and storing in a data base information pertaining to certain measured variables of each answered communication connection, said storing occurring substantially concurrently with the occurrence of the measured variable,

means for comparing subsequently received variables with priorly stored already displayed variables, and

means for displaying selected changed variables.

8. The invention set forth in claim 7 wherein said communication connections are handled by attendants each having a unique identification code and each having more than one work state,

said system including means for separating said displayed variables into segments, one segment containing attendant and terminal identification and work state information, and one segment containing system statistical information, and wherein said system also includes means for selectively updating certain information within each segment at intervals unique to said segment.

9. The invention set forth in claim 8 wherein said system includes means for assigning attendants with specific terminals and wherein said attendant information includes the unique identification code of each